

Appl. No. 10/617,083
Appeal Brief dated April 6, 2007
Reply to Office Action dated June 16, 2006

CERTIFICATE OF TRANSMISSION

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PATENT APPLICATION
Docket No. 3507.2.11

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Pei-Yuan Lee

Serial No.: 10/617,083

Filed: July 10, 2003

Title: PUNCHING APPARATUS

Examiner: Isaac N. Hamilton

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Group Art
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APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

An Office Action dated June 16, 2006 rejected claims 16-18 and 20-26 in the present application. A Notice of Appeal was submitted on September 16, 2006. Appellant's Appeal Brief is being filed herewith.

1. REAL PARTY IN INTEREST

The real party in interest is the assignee, Primax Electronics Ltd..

2. RELATED APPEALS AND INTERFERENCES

There are no related appeals and/or interferences.

3. STATUS OF CLAIMS

Claims 16-18 and 20-26 are pending in the present application. Claims 16-18 and 20-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 2,149,268 to Brennan (hereinafter, "Brennan") in view of U.S. Patent No. 3,890,870 to Van Cleave (hereinafter, "Van Cleave"), or alternatively in view of U.S. Patent No. 4,466,322 to Mori (hereinafter, "Mori").

Appellant appeals the above rejections.

4. STATUS OF AMENDMENTS

No amendments were filed subsequent to the final rejection.

5. SUMMARY OF CLAIMED SUBJECT MATTER

As required by 37 C.F.R. § 41.37(c)(1)(v), a summary of claimed subject matter immediately follows. The references to the specification refer only to embodiments of the invention. The invention is defined by the claims. Accordingly, these references to the specification are not meant to limit the scope of the claims at issue in any way but are only provided because they are mandated by 37 C.F.R. § 41.37(c)(1)(v). All references are to the patent specification.

16. A punching apparatus for punching holes in an article, comprising:

a main body for receiving therein said article and configured to be depressed in a leveraging action to exert a punching force on said article to punch holes; (paragraphs 0023-0025; Figures 2(a)-(c); elements 22, B)

a roller bearing for transmitting a depressing force to said main body by depressing said main body to provide said punching force in response to an external force; and (paragraph 0024; Figure 2(b); element 21)

a non-linear levering rod comprising a force-receiving portion for being applied thereonto said external force, a pivot portion coupled to said main body for allowing said levering rod to pivot relative to said main body in response to said external force, a bent portion connected to said force-receiving portion and said pivot portion, wherein the levering rod is substantially linear between the pivot portion and the bent portion and wherein the levering rod is substantially linear between the force-receiving portion and the bent portion and wherein the levering rod between the force-receiving portion and the bent portion is kept at a substantially horizontal level in a rest state, a depressing-force exerting portion disposed only between said pivot portion and said bent portion and coupled to said roller bearing for transmitting said roller bearing to move, said non-linear levering rod transmitting said roller bearing to depress said main body while moving in response to said external force. (paragraphs 0023-0026; Figures 2(a)-2(c); elements 20, C, D)

22. A punching apparatus for punching holes in an article, comprising:

a main body for receiving therein said article and configured to be depressed in a levering action to exert a punching force on said article to punch holes; (paragraphs 0023-0025; Figures 2(a)-(c); elements 22, B)

a roller bearing for transmitting a depressing force to said main body by depressing said main body to provide said punching force in response to an external force; and (paragraph 0024; Figure 2(b); element 21)

a non-linear levering rod comprising a force-receiving portion for being applied thereonto said external force, a pivot portion coupled to said main body for allowing said levering rod to pivot relative to said main body in response to said external force, a bent portion connected to said force-receiving portion and said pivot portion, wherein the levering rod is substantially linear between the pivot portion and the bent portion and wherein the levering rod is substantially linear between the force-receiving portion and the bent portion and wherein the

levering rod between the force-receiving portion and the bent portion is kept at a substantially horizontal level in a rest state, a depressing-force exerting portion coupled to said roller bearing for transmitting said roller bearing to move and wherein said depressing-force exerting portion and said roller bearing are disposed between said pivot portion and said bent portion, said non-linear levering rod transmitting said roller bearing to depress said main body while moving in response to said external force. (paragraphs 0023-0026; Figures 2(a)-2(c); elements 20, C, D)

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The following issue is presented for review:

Whether claims 16-18 and 20-26 are unpatentable under 35 U.S.C. § 103(a) over Brennan in view of Van Cleave, or alternatively in view of Mori.

7. ARGUMENT

A. Claims 16-18 and 20-26 Rejected under 35 U.S.C. § 103(a)

Claims 16-18 and 20-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of Van Cleave, or alternatively in view of Mori. This rejection is respectfully traversed.

The M.P.E.P. states that:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

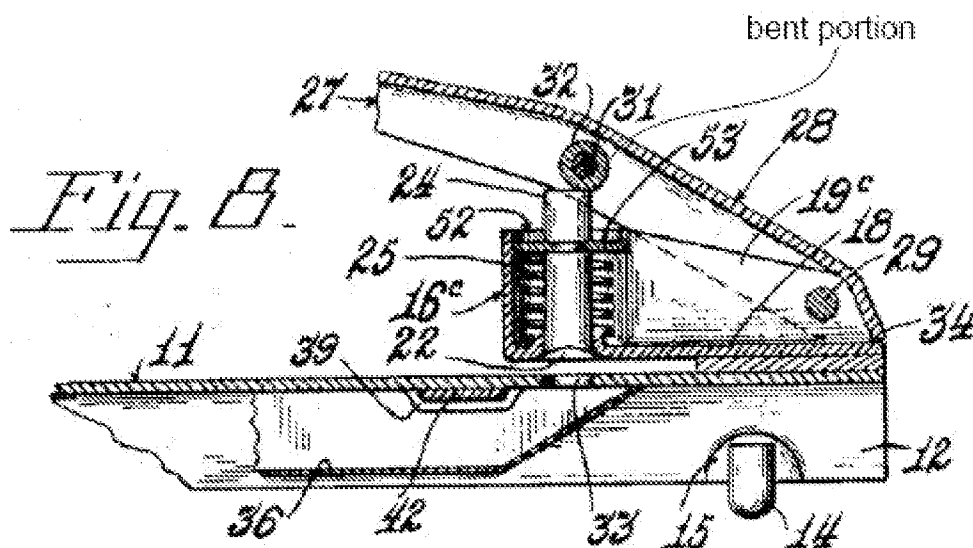
The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as

to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

M.P.E.P. § 2142.

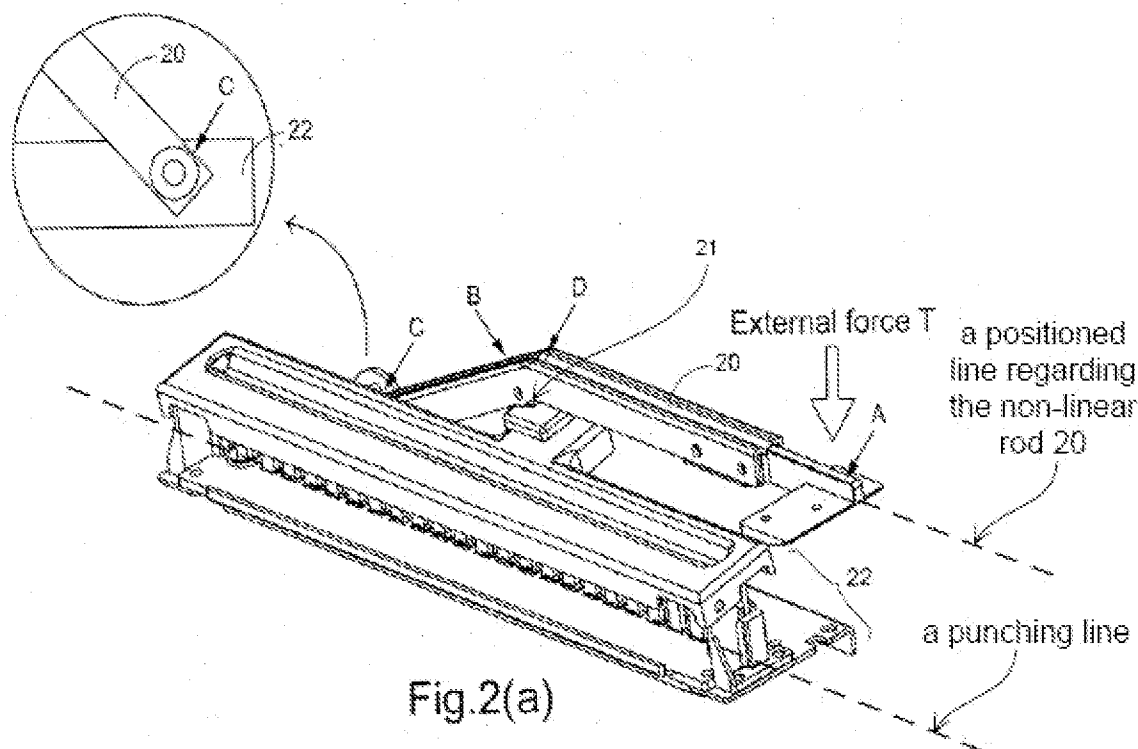
In the Final Office Action mailed June 16, 2006, the Examiner states: “Brennan discloses...non-linear levering rod 27, 28, 19c in fig. 8,...; bent portion slightly to the left of roller 32 along the levering rod as shown in figure 8; levering rod is linear between the pivot portion and the bent portion as shown in figure 8; levering rod is linear between the force receiving portion and the bent portion as shown in figure 8;...” Applicant respectfully submits that there are a number of mistaken interpretations regarding Figure 8 of the Brennan patent.

Clearly, after reviewing page 2, left col., lines 17-36, right col., lines 29-40, and the relevant figures in Brennan, it is apparent that the roller 32 is not only coupled to the bent portion, but is formed by an overlap structure including a sustaining and a bent structure. This can be seen in Figure 8 of Brennan:



The structure in Brennan has a serious drawback; that is, once an external force applied to the receiving portion 27 is too high and the handle is made of plastic material or the like, the broken point may be formed at the bent portion. This is in contrast to the claimed invention. In the claimed invention, as shown in Figure 2(a) of the present application, the roller 21 is not coupled

to the bent portion D and there exists a linear and short rod between the bent portion D and the roller 21.



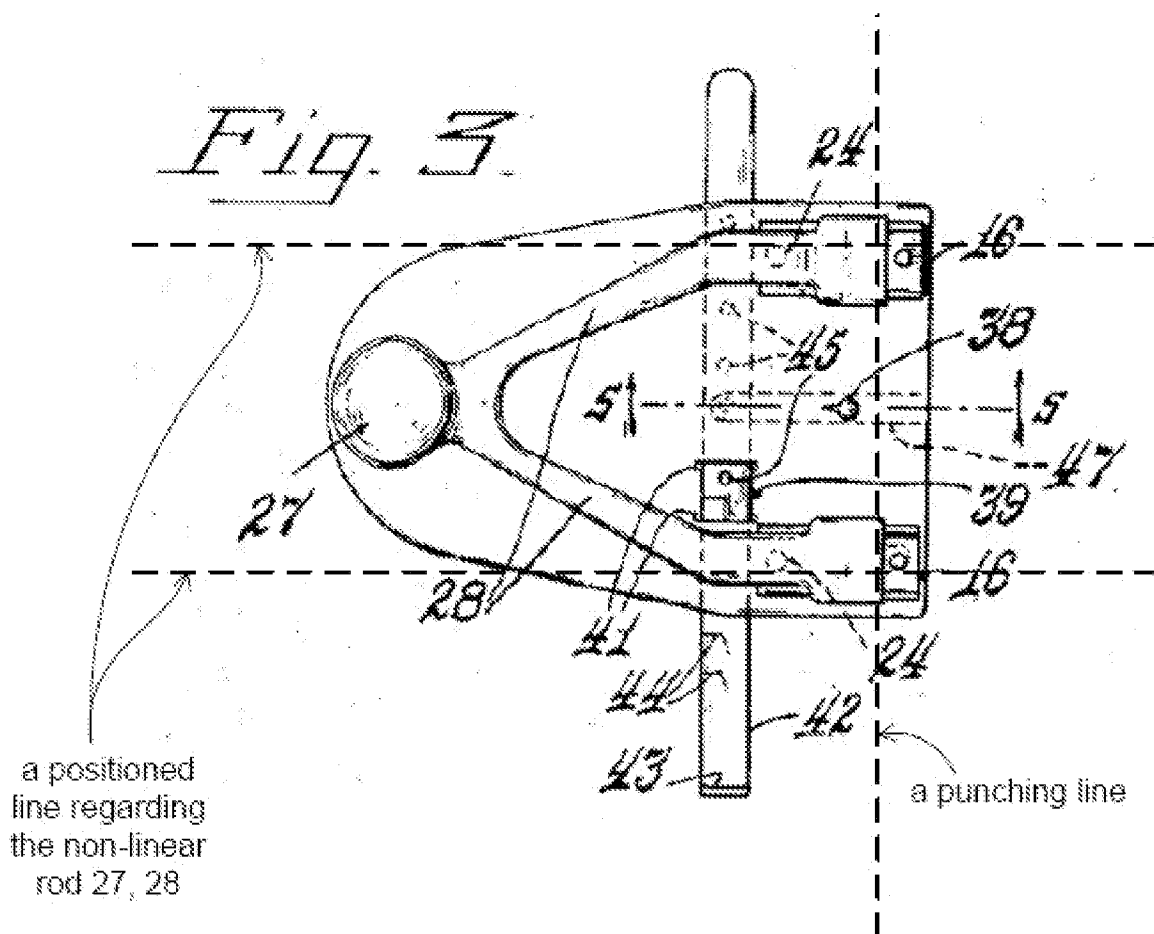
Furthermore, referring to paragraph 0025 of the present patent specification:

The dimensions of the punching apparatus can be exemplified with reference to Fig. 2(c). When no external force is exerted on the force-receiving portion A, the height of the overall punching apparatus is approximately 131 mm. The distance d1 between the depressing-force exerting portion B and the pivot portion C is approximately 132.4 mm. The distance d2 between the bent portion D and the pivot portion C is approximately 142.5 mm. The distance d3 between the force-receiving portion A and the bent portion D is approximately 229.7 mm. Thus, the ratio of d1:d2:d3 in this example is about 0.58:0.60:1. Since the distance d3 is larger than the distance d2, the leverage of the levering rod 20 can be effectively increased. ...

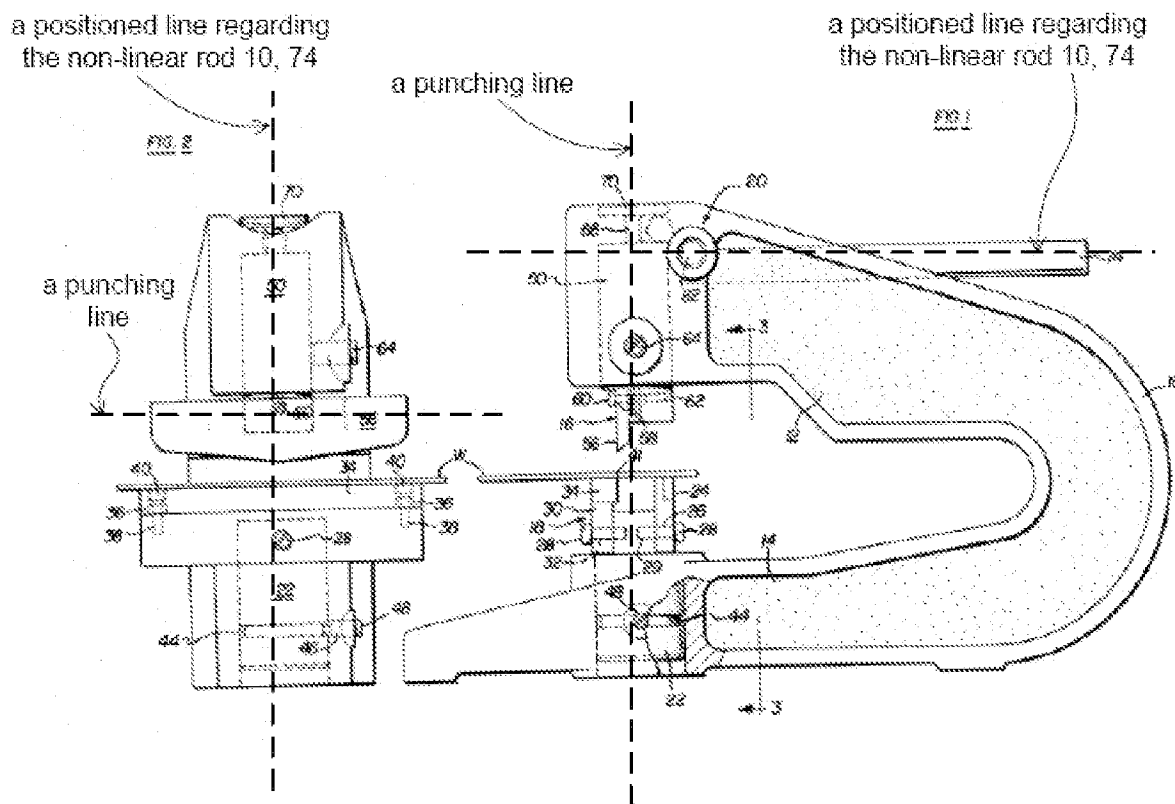
In other words, the strength of the sustaining force generated by the roller 21 and the depressing-force exerting portion B will be increased so as to allow the strength of the external force T to be

increased. The above inventive structure of the claimed invention clearly is not taught or suggested by Brennan, Cleave, Mori, or the combination thereof.

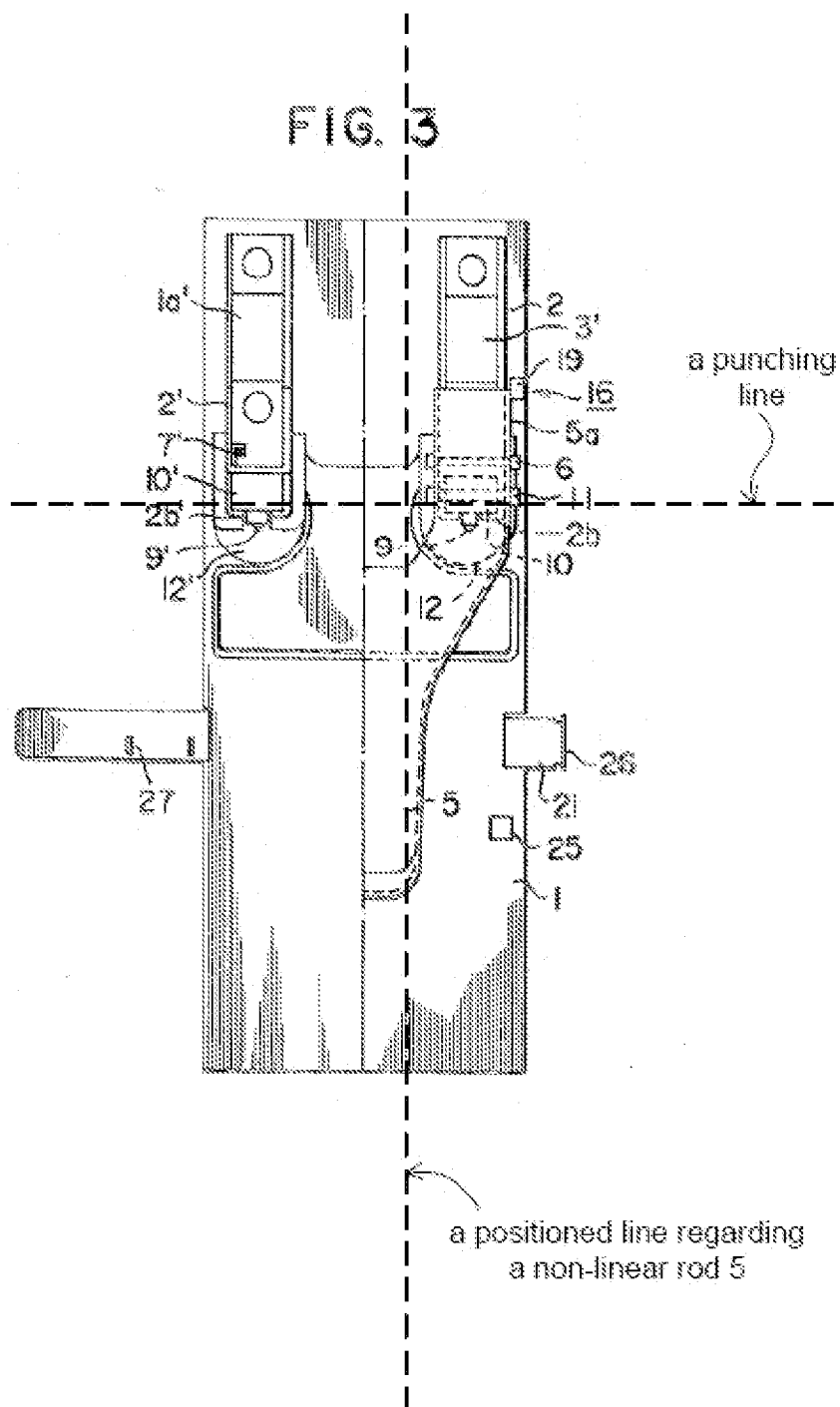
Secondly, in the claimed invention the punching line is parallel to the non-linear rod. This can be seen by reference to Figure 2(a) of the present application (see above). In Brennan the punching line is NOT parallel to the non-linear rod, as shown in Fig. 3 of Brennan.



Similarly, in Cleave the punching line is NOT parallel to the non-linear rod, as shown in Figures 1-2 of Cleave.

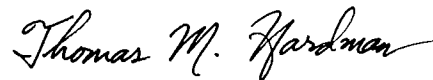


Similarly, in Mori the punching line is NOT parallel to the non-linear rod, as shown in Figure 3 of Mori.



Because of this structural difference, in the claimed invention the volume of the punching device is more compact than that disclosed in the cited references. The above inventive structure of the claimed invention clearly is not taught or suggested by Brennan, Cleave, Mori, or the combination thereof.

Respectfully submitted,



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Date: April 6, 2007

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CLAIMS APPENDIX

Listing of Claims involved in the appeal:

16. A punching apparatus for punching holes in an article, comprising:
- a main body for receiving therein said article and configured to be depressed in a levering action to exert a punching force on said article to punch holes;
- a roller bearing for transmitting a depressing force to said main body by depressing said main body to provide said punching force in response to an external force; and
- a non-linear levering rod comprising a force-receiving portion for being applied thereonto said external force, a pivot portion coupled to said main body for allowing said levering rod to pivot relative to said main body in response to said external force, a bent portion connected to said force-receiving portion and said pivot portion, wherein the levering rod is substantially linear between the pivot portion and the bent portion and wherein the levering rod is substantially linear between the force-receiving portion and the bent portion and wherein the levering rod between the force-receiving portion and the bent portion is kept at a substantially horizontal level in a rest state, a depressing-force exerting portion disposed only between said pivot portion and said bent portion and coupled to said roller bearing for transmitting said roller bearing to move, said non-linear levering rod transmitting said roller bearing to depress said main body while moving in response to said external force.
17. The punching apparatus according to claim 16 wherein said bent portion has a distance from said force-receiving portion farther than from said pivot portion.

18. The punching apparatus according to claim 16 wherein said roller bearing rests on said main body when no external force is exerted on said force-receiving portion.

20. The punching apparatus according to claim 16 wherein said bent portion has an angle from 135 to 170 degrees.

21. The punching apparatus according to claim 16 wherein said bent portion has an angle from 145 to 160 degrees.

22. A punching apparatus for punching holes in an article, comprising:
a main body for receiving therein said article and configured to be depressed in a levering action to exert a punching force on said article to punch holes;

a roller bearing for transmitting a depressing force to said main body by depressing said main body to provide said punching force in response to an external force; and

a non-linear levering rod comprising a force-receiving portion for being applied thereonto said external force, a pivot portion coupled to said main body for allowing said levering rod to pivot relative to said main body in response to said external force, a bent portion connected to said force-receiving portion and said pivot portion, wherein the levering rod is substantially linear between the pivot portion and the bent portion and wherein the levering rod is substantially linear between the force-receiving portion and the bent portion and wherein the levering rod between the force-receiving portion and the bent portion is kept at a substantially horizontal level in a rest state, a depressing-force exerting portion coupled to said roller bearing for transmitting said roller bearing to move and wherein said depressing-force exerting portion and said roller bearing are disposed between said pivot portion and said bent portion, said non-

linear levering rod transmitting said roller bearing to depress said main body while moving in response to said external force.

23. The punching apparatus according to claim 22 wherein said bent portion has a distance from said force-receiving portion farther than from said pivot portion.

24. The punching apparatus according to claim 22 wherein said roller bearing rests on said main body when no external force is exerted on said force-receiving portion.

25. The punching apparatus according to claim 22 wherein said bent portion has an angle from 135 to 170 degrees.

26. The punching apparatus according to claim 22 wherein said bent portion has an angle from 145 to 160 degrees.

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EVIDENCE APPENDIX

NONE.

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RELATED PROCEEDINGS APPENDIX

NONE.